

STEM-H

**Demand for STEM-H Skills Outpace
Overall Growth**

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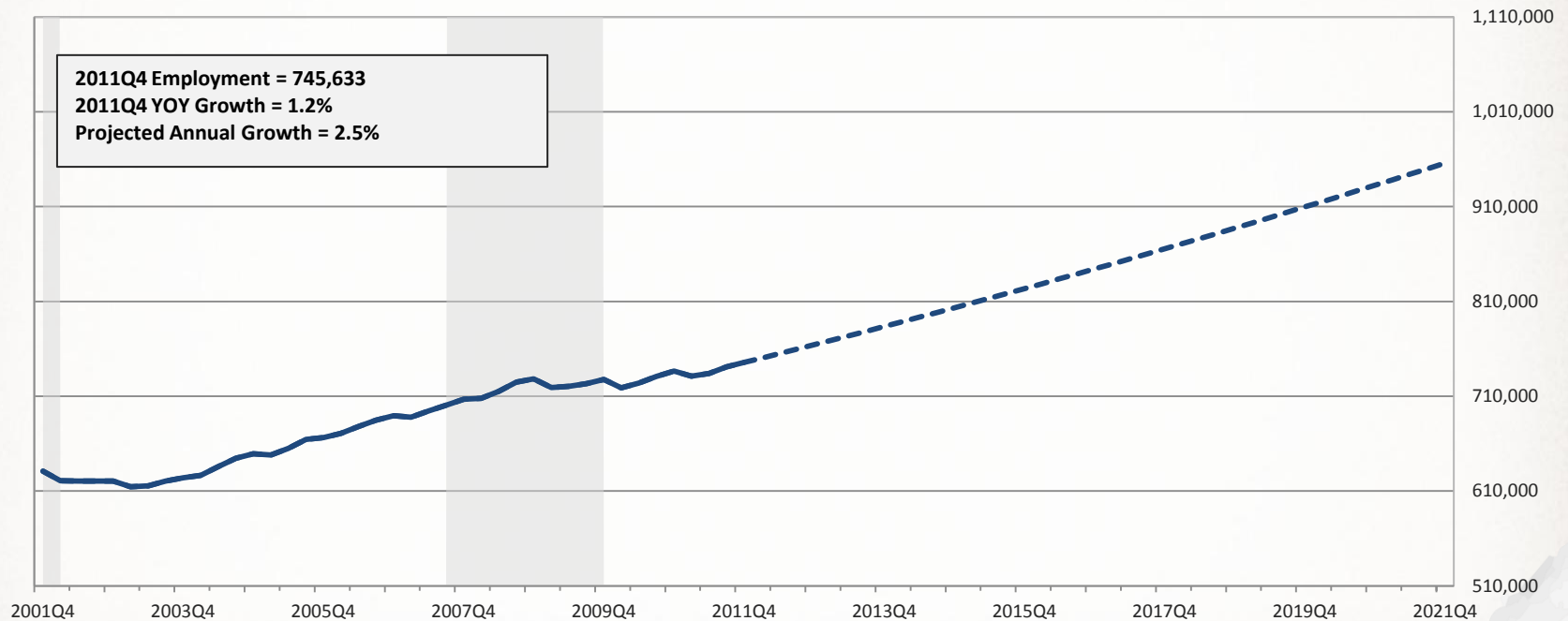
Industry Mix is Favorable

	Current		Forecast		
	Four Quarters Ending with 2012q1		Over the Next 10 Years		
Industry	Employment	Avg. Annual Wages	Total Approx Repl Demand	Total Empl Change	Avg. Annual Growth Percent
Agriculture, Forestry, Fishing and Hunting	11,942	\$28,433	3,123	-277	-0.2%
Mining, Quarrying, and Oil and Gas Extraction	9,105	\$70,519	1,949	197	0.2%
Utilities	18,622	\$77,226	4,368	991	0.5%
Construction	188,377	\$48,307	40,546	62,849	2.9%
Manufacturing	238,888	\$54,025	49,374	4,291	0.2%
Wholesale Trade	111,756	\$71,756	26,478	17,522	1.5%
Retail Trade	409,932	\$26,156	122,691	53,393	1.2%
Transportation and Warehousing	122,501	\$47,947	29,247	19,864	1.5%
Information	78,703	\$77,022	18,212	4,405	0.5%
Finance and Insurance	124,530	\$76,207	30,019	12,438	1.0%
Real Estate and Rental and Leasing	51,684	\$46,086	11,147	7,359	1.3%
Professional, Scientific, and Technical Services	401,329	\$96,277	88,606	145,702	3.1%
Management of Companies and Enterprises	73,538	\$103,531	15,062	4,262	0.6%
Administrative and Support	204,920	\$36,852	44,556	44,036	2.0%
Educational Services	357,718	\$40,024	78,208	48,106	1.3%
Health Care and Social Assistance	441,464	\$45,262	87,270	156,103	3.1%
Arts, Entertainment, and Recreation	66,104	\$24,219	20,659	12,426	1.7%
Accommodation and Food Services	304,057	\$16,846	103,462	29,171	0.9%
Other Services (except Public Administration)	130,632	\$37,860	29,327	18,004	1.3%
Public Administration	241,093	\$71,671	54,514	4,556	0.2%
Unclassified	3,773	\$40,870	911	679	1.7%
Total All Industries	3,590,668	\$51,246	866,203	646,571	1.7%

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STEM-H Expected to Grow Faster than the 1.7% Annual Average for All Industries

Employment Growth in STEM-H Industries
Historical and Projected, Virginia

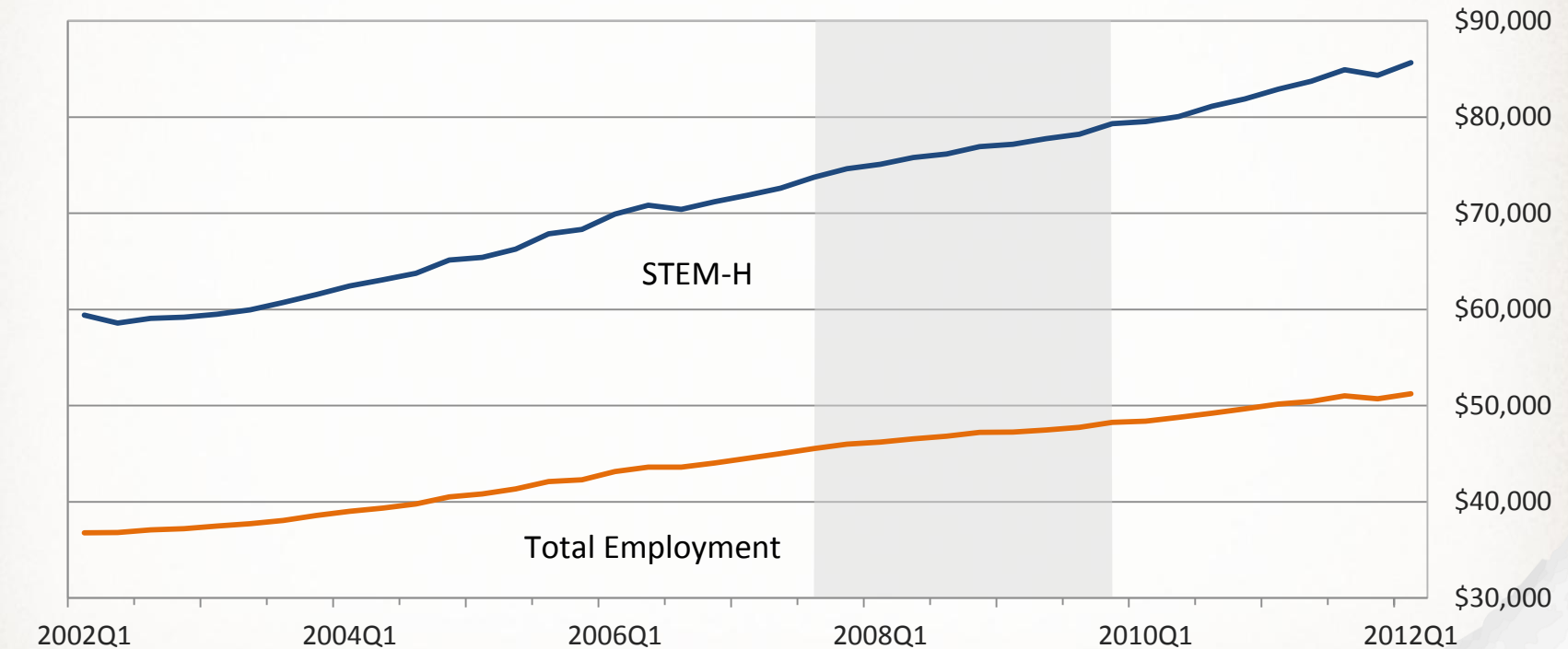


Note: shaded areas represent recessions.
Source: JobsEQ and the Bureau of Labor Statistics

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STEM-H Industries Pay Higher Wages

Average Annual Wages, STEM-H Industries, Virginia



Note: shaded areas represent recessions.
Source: JobsEQ and the Bureau of Labor Statistics

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Top Ten STEM-H Industries, Virginia

		Four Quarters Ending 2011Q4			Long-Term Forecast, Annual		
NAICS	Industry	Employment	Average Annual Wages	Employment Change over the Last Year	Replacement Demand	Employment Growth	Growth Percent
5415	Computer Systems Design and Related Services	144,581	\$107,962	4,791	2,553	5,662	3.9%
6221	General Medical and Surgical Hospitals	114,116	\$51,979	-311	1,971	1,745	1.5%
5416	Management, Scientific, and Technical Consulting Services	69,922	\$105,160	2,338	1,385	3,288	4.7%
5413	Architectural, Engineering, and Related Services	64,907	\$88,709	-1,623	1,315	1,640	2.5%
6211	Offices of Physicians	61,363	\$79,741	1,474	1,077	1,775	2.9%
5417	Scientific Research and Development Services	28,197	\$105,660	345	617	326	1.2%
5171	Wired Telecommunications Carriers	22,207	\$92,151	-881	440	-50	-0.2%
6212	Offices of Dentists	22,072	\$54,387	632	417	625	2.8%
5419	Other Professional, Scientific, and Technical Services	19,980	\$48,821	1,144	365	577	2.9%
6213	Offices of Other Health Practitioners	17,624	\$40,271	698	301	790	4.5%
	Total STEM-H Industries	737,967	\$84,347	9,833	13,991	18,574	2.5%
Source: Bureau of Labor Statistics and Chmura Economics & Analytics							

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Top Ten STEM-H Occupations, Virginia

		----- 2011Q4-----			Long-Term Forecast, Annual		
SOC	Title	Employment	Average Annual Wages	Employment Change over the Last Year	Replacement Demand	Employment Growth	Growth Percent
29-1111	Registered Nurses*	60,768	\$74,100	558	977	1,488	2.4%
15-1132	Software Developers, Applications	27,135	\$100,200	675	250	953	3.5%
15-1150	Computer Support Specialists	25,979	\$54,500	507	631	670	2.6%
15-1121	Computer Systems Analysts	23,228	\$91,200	497	396	710	3.1%
15-1133	Software Developers, Systems Software	18,780	\$108,000	425	169	781	4.2%
15-1131	Computer Programmers	16,715	\$81,900	413	369	345	2.1%
15-1142	Network and Computer Systems Administrators	13,291	\$82,100	198	198	448	3.4%
15-1179	Information Security Analysts, Web Developers, and Computer Network Architects*	12,431	\$89,300	214	167	364	2.9%
11-3021	Computer and Information Systems Managers	12,396	\$137,300	224	175	333	2.7%
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	10,865	\$86,400	223	238	253	2.3%
Source: BLS & JobsEQ							

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Top Ten STEM-H Postsecondary Programs, Virginia

CIP	Title	Awards 2010-2011	Awards Change over the Last Year
	STEM-H TOTAL	25192	1417
51.3801	Registered Nursing/Registered Nurse	4113	57
26.0101	Biology/Biological Sciences, General	2311	150
11.0101	Computer and Information Sciences, General	1038	-1023
11.0401	Information Science/Studies	874	574
30.0101	Biological and Physical Sciences	716	77
11.1003	Computer and Information Systems Security/Information Assurance	704	625
14.1901	Mechanical Engineering	573	39
40.0501	Chemistry, General	558	3
14.0903	Computer Software Engineering	556	-277
27.0101	Mathematics, General	556	34
Source: National Center for Education Statistics			

STEM-H Award Production in Virginia

Lags the Nation

SOC	Title	Employment 2011Q3	Awards 2009-2010	Award Production Above (Below) US Average
11-9041	Architectural and Engineering Managers	5,844	680	194
15-1131	Computer Programmers	16,615	458	119
29-1111	Registered Nurses*	60,572	4,320	80
17-2112	Industrial Engineers	4,726	215	71
17-2199	Engineers, All Other	4,469	449	66
17-3022	Civil Engineering Technicians	2,742	18	(184)
29-2071	Medical Records and Health Information Technicians	4,368	454	(184)
17-3011	Architectural and Civil Drafters	3,753	112	(218)
15-1132	Software Developers, Applications	26,973	844	(279)
15-1179	Information Security Analysts, Web Developers, and Computer Network Architects*	12,379	332	(424)
TOTAL STEM-H		424,509	22,277	(4,448)

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